

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB2004/004428

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61B5/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 197 852 A (SCHAL, WILFRIED ET AL) 15 April 1980 (1980-04-15) column 3, lines 21-64; figure 1 -----	1-4
A	US 5 165 407 A (WILSON ET AL) 24 November 1992 (1992-11-24) abstract; figure 1 -----	1-6
A	US 5 158 083 A (SACRISTAN ET AL) 27 October 1992 (1992-10-27) the whole document -----	1-6

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

25 January 2005

Date of mailing of the international search report

23.05.2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Chopinaud, M

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2004/004428

Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-6

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-6

Sensing device comprising :
a sensor for insertion inside the body to measure one of the following parameters : partial CO₂ pressure, partial oxygen pressure, temperature, pH, glucose concentration;
an electrical cable for connection to the sensor;
a sheath;
wherein the sheath comprises a plurality of longitudinally extending flexible portions to maintain the sensor inside the body.

2. claims: 7-9

Sensing device comprising :
a sensor for sensing partial CO₂ pressure having two electrodes;
an electrical cable connected to the electrodes;
a sheath
wherein the sheath forms the carbon dioxide permeable membrane.

3. claims: 10-16

Sensing device comprising :
a sensor for insertion into the tissue to measure one of the following parameters : partial CO₂ pressure, temperature, pH, glucose concentration;
a signal processing device;
a reference electrode;
wherein the reference electrode is configured to compensate the electrical signals from the electrical sensor for electromagnetic noise from the patient by reference to signals from the reference electrode.

4. claim: claim 17

Method of manufacturing a sensor comprising :
a sensor body having a water-filled chamber closed by a semi-permeable membrane, the method comprising :
immersing the sensor in water; and
attaching the membrane to the sensor body to close the chamber while the sensor body is in the water.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB2004/004428

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 4197852	A	15-04-1980	DE FR GB JP JP JP	2726450 A1 2394082 A1 2000294 A ,B 1386383 C 54004883 A 61054410 B	21-12-1978 05-01-1979 04-01-1979 26-06-1987 13-01-1979 21-11-1986

US 5165407	A	24-11-1992	AT AU AU CA DE DE DK EP ES GR JP JP WO	194062 T 640785 B2 7782891 A 2080022 A1 69132270 D1 69132270 T2 525127 T3 0525127 A1 2148154 T3 3034376 T3 3194434 B2 5506172 T 9115993 A1	15-07-2000 02-09-1993 11-11-1991 20-10-1991 03-08-2000 26-10-2000 28-08-2000 03-02-1993 16-10-2000 29-12-2000 30-07-2001 16-09-1993 31-10-1991

US 5158083	A	27-10-1992	AU WO ZA	6754790 A 9105508 A1 9008487 A	16-05-1991 02-05-1991 28-08-1991
